UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

APRIL 1968

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

CONTENTS

Page

Sea Surface Temperature Charts, Eastern Pacific Ocean, April 1968 1

U. S. Department of the Interior
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P. O. Box 271
La Jolla, California 92037

*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, U. S. Custom House, Terminal Island, California

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN
APRIL 1968

Acknowledgements

The following organizations and stations contributed data for the April 1968 charts:

U.S. Bureau of Commercial Fisheries Exploratory Fishing and Gear Research Base, Seattle, Washington
U.S. Bureau of Commercial Fisheries Biological Laboratories La Jolla, California; Honolulu, Hawaii; and Seattle, Washington
U.S. Coast Guard Air Station, San Diego, California
U.S. Coast Guard, Rockaway
U.S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U.S. Naval Weather Service, Fleet Numerical Weather Facility Monterey, California
Environmental Science Services Administration U.S. Weather Bureau, San Diego, California
Hopkins Marine Station, Pacific Grove, California, J. P. Balesteri
Instituto de Fomento Pesquero, Santiago, Chile, by Izadore Barrett
Inter-American Geodetic Survey by David Ortega at Manzanillo, Mexico; L. A. Peren at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; S. Valenzuela at La Libertad, Ecuador; LMS, EGS, MCHF, APM at Talara, Peru; Felise Falcon at San Juan, Peru; Arica, Antofagasta, Caldera, Valparaiso, and Talcahuano, Chile, through the courtesy of St. Hellmuth A. Sievers C. at the Instituto Hydrografico de la Armada, Valparaiso, Chile
Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California
Kelco Company, San Diego, California
Matson Navigation Company, San Francisco, California, S.S. Californian
Oregon State University, Department of Oceanography, Corvallis, Oregon R/V Yaquina
Pacific Missile Range, Range Operations Department, Geophysics Division, Point Mugu, California
Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by G. C. Wilks at Langara Island Light; W. K. Richardson at Cape St. James Light; Lily Collins at Quatsino Lightstation; O. A. Edwards at Amphitrite Point Light
Scripps Institution of Oceanography, La Jolla, California, by Margaret Robinson and Hans Klein
W. R. Grace and Company, New York, by Dr. I. William Lane
Ships Martinac

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 9000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H.O. 225. Hatched areas are colder in 1968.

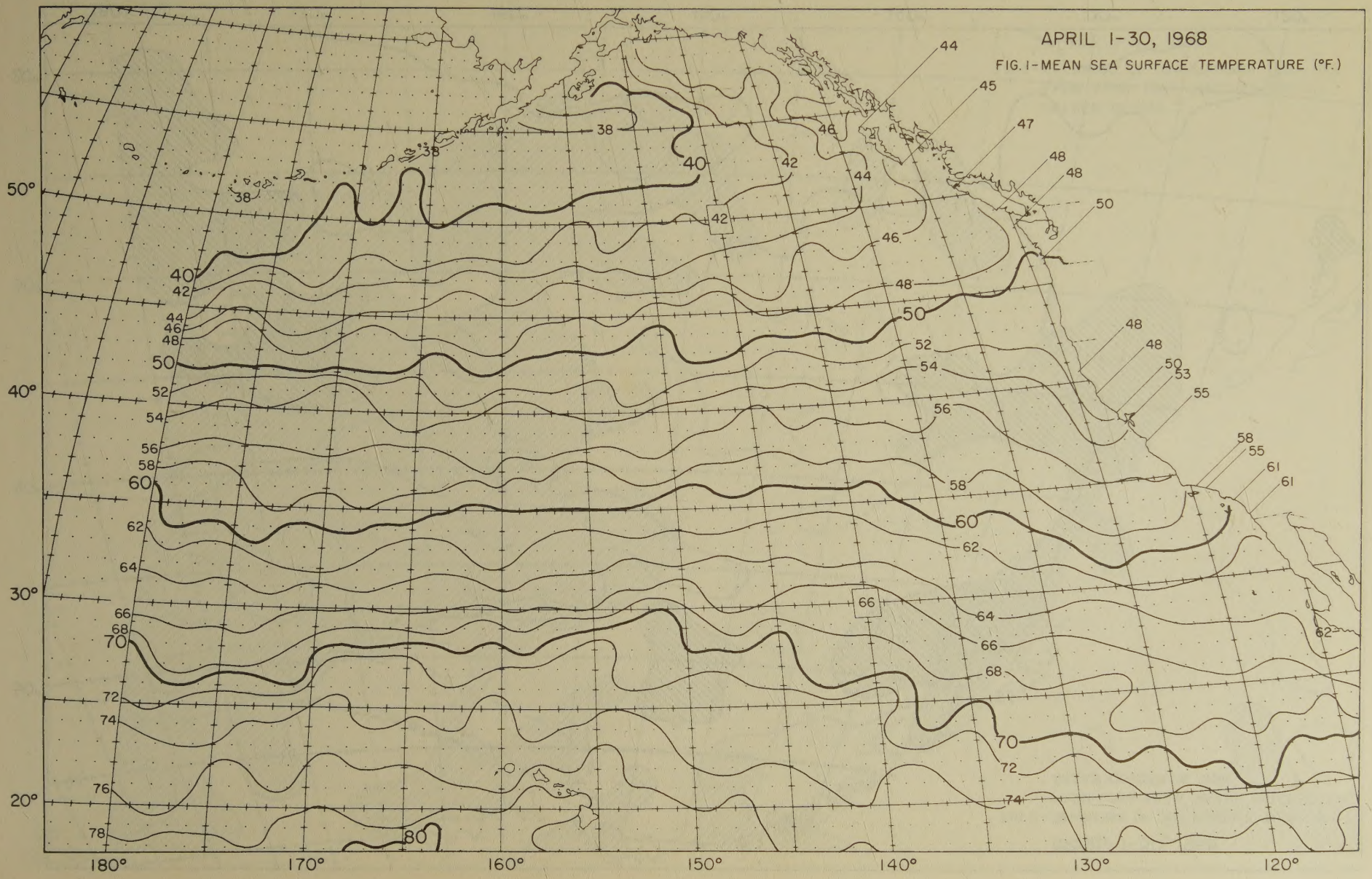
Figure 3.--Deviation of sea surface temperatures (°F) from those of April 1967. Hatched areas are colder in 1968.

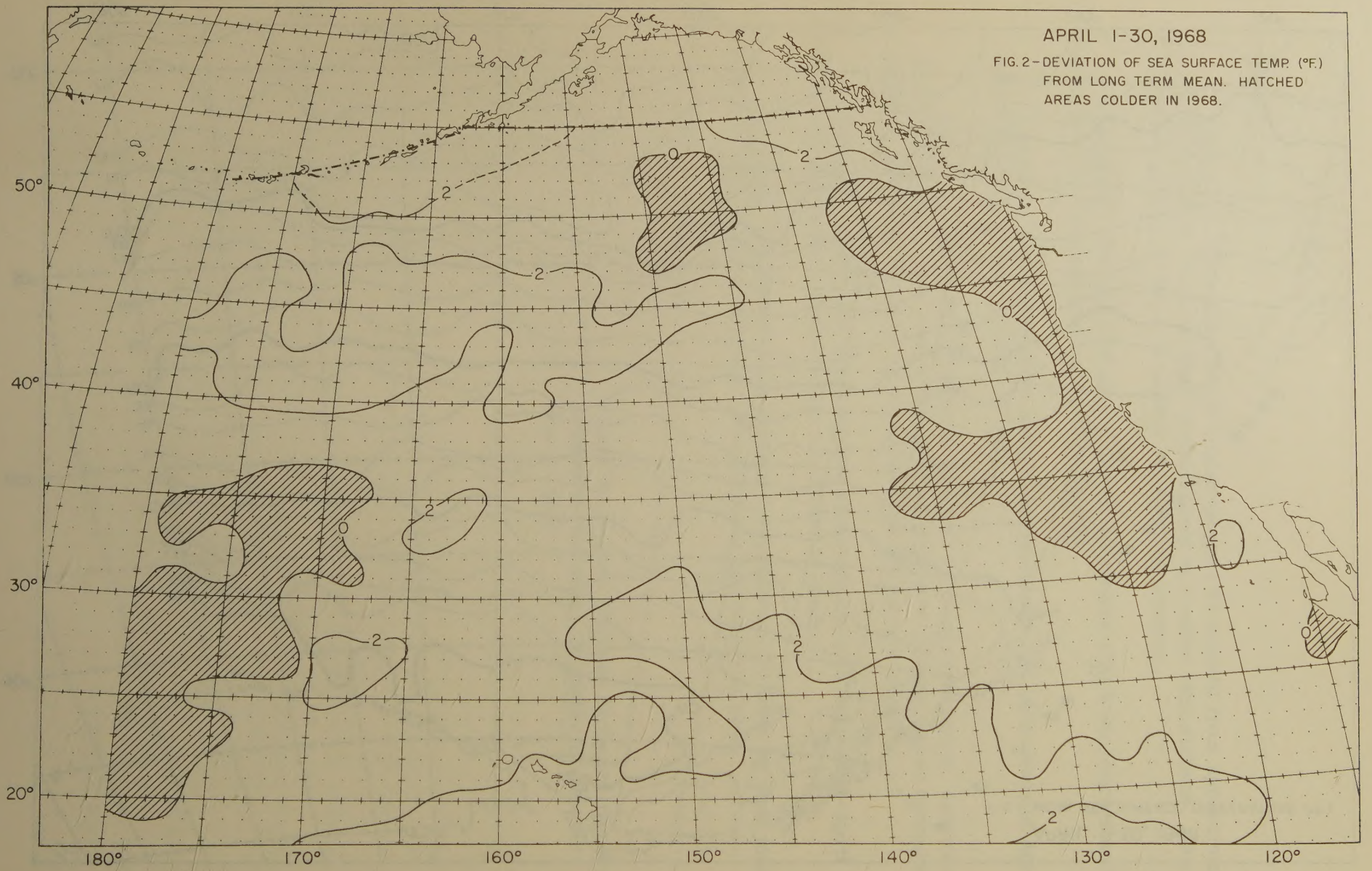
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 3000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

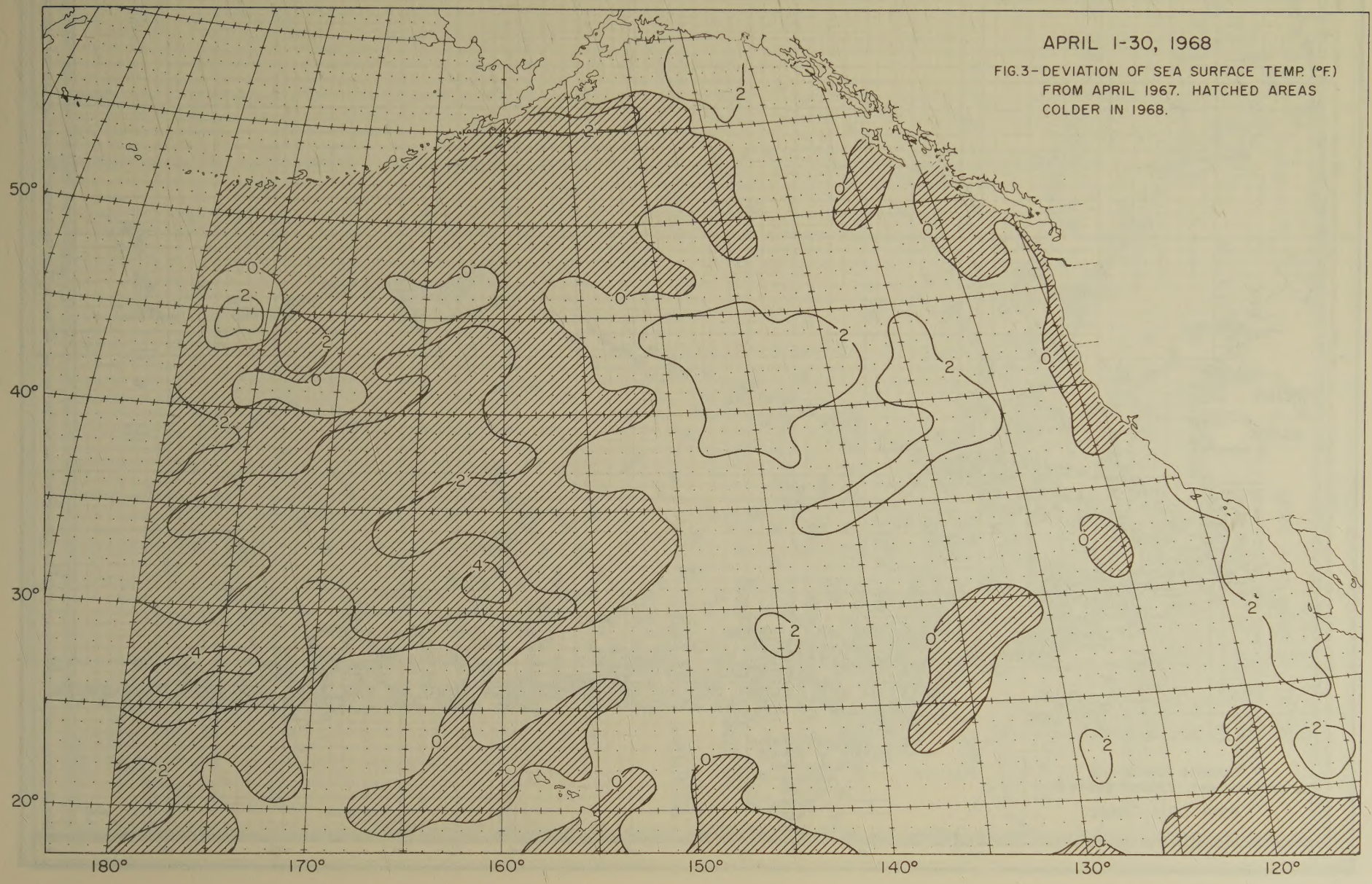
Figure 5.--Deviation of sea surface temperatures (°F) April 1968-April 1967 by 1-degree squares. Shaded areas are colder in 1968.

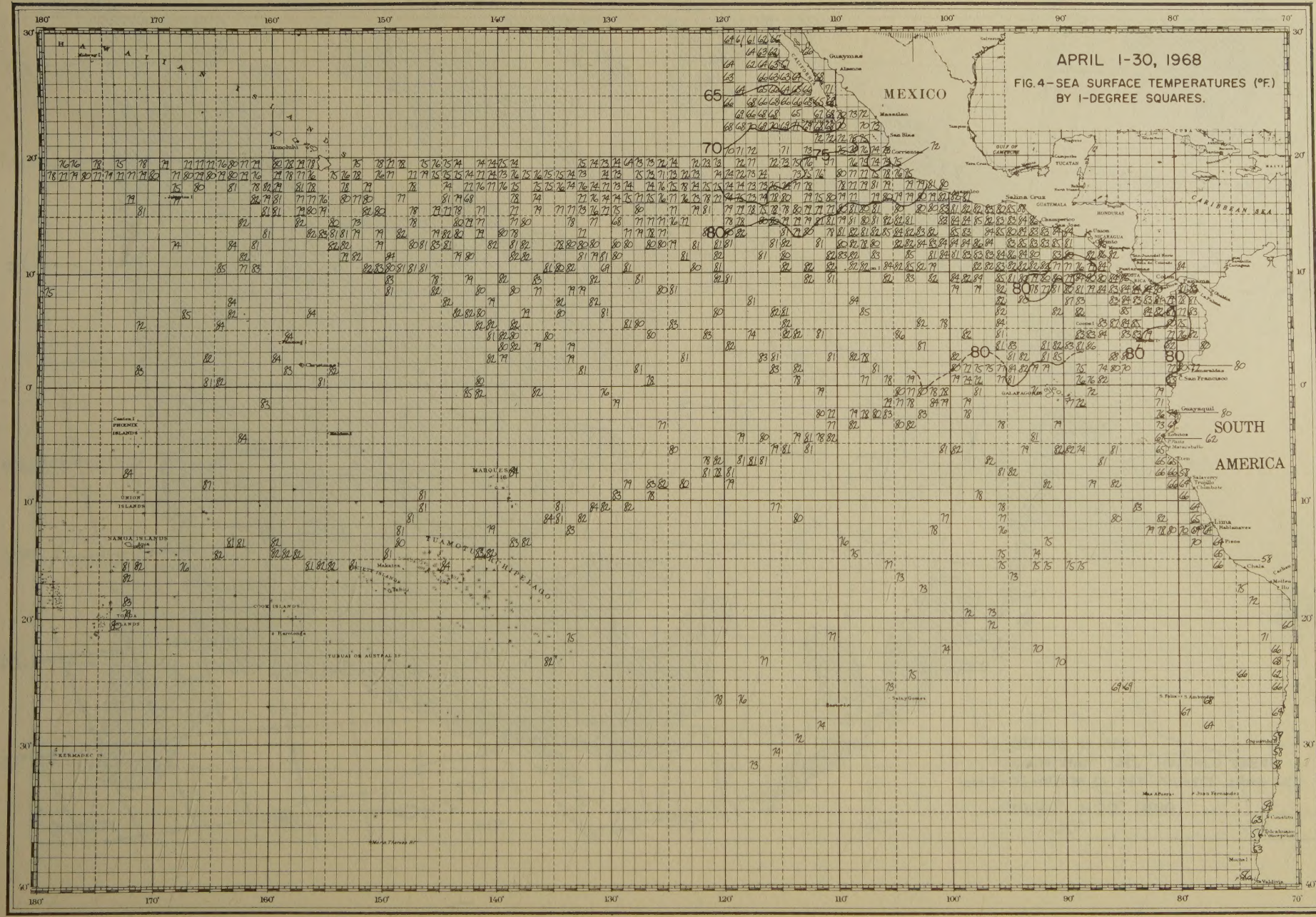
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1968.

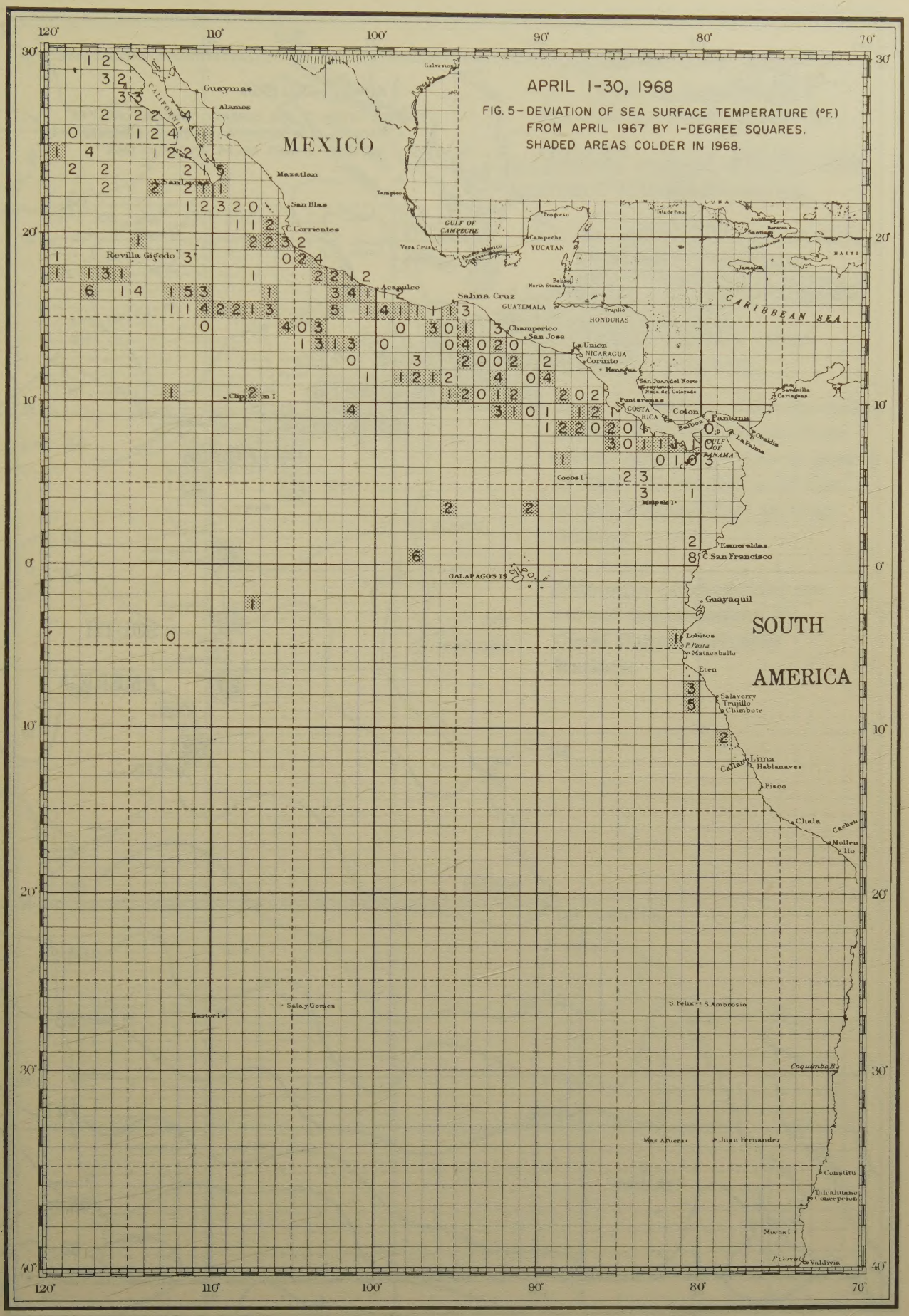
James A. Renner, Fishery Biologist (General)
Kenneth S. Raymond, Scientific Illustrator
May 8, 1968

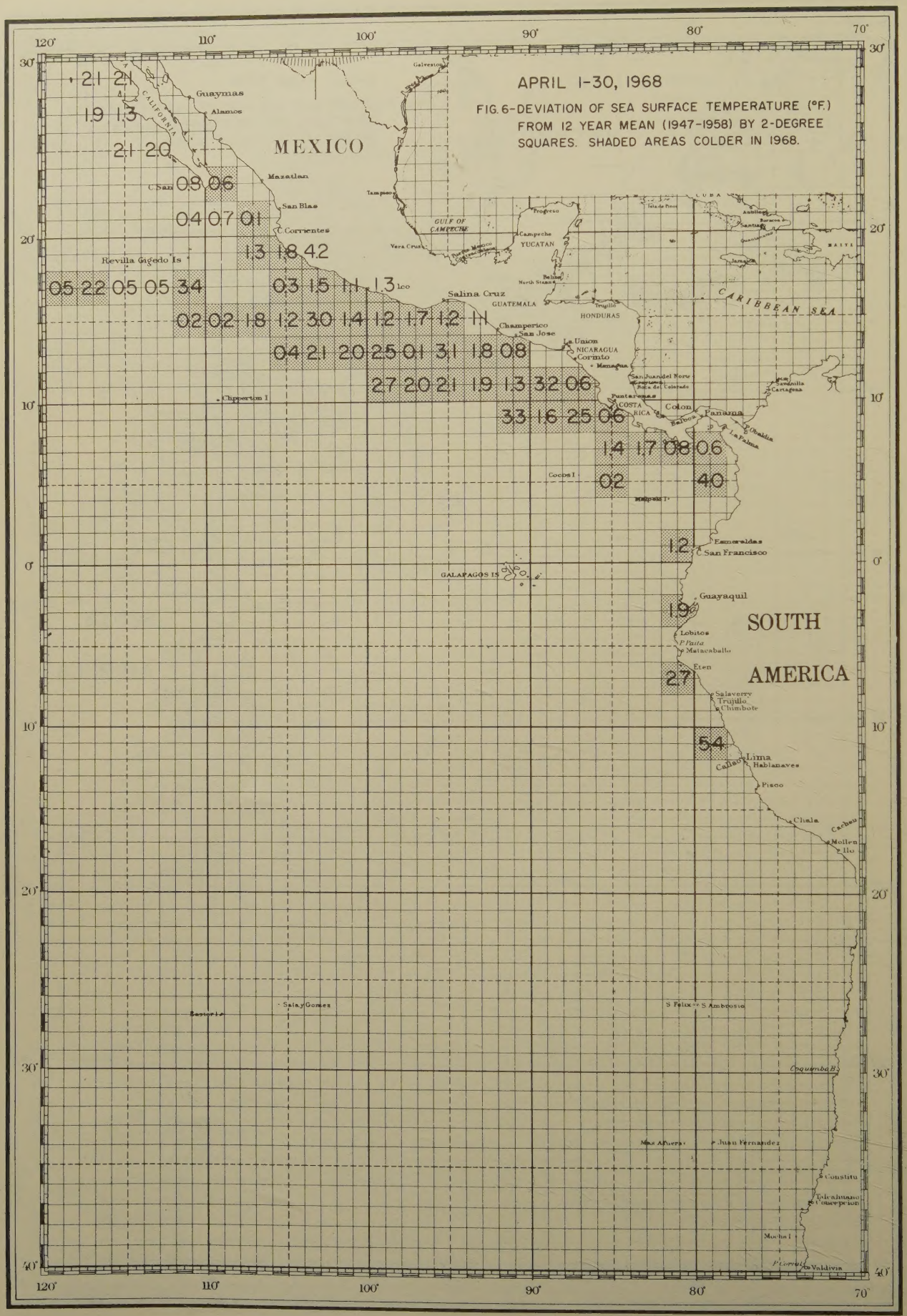

APRIL 1-30, 1968
FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

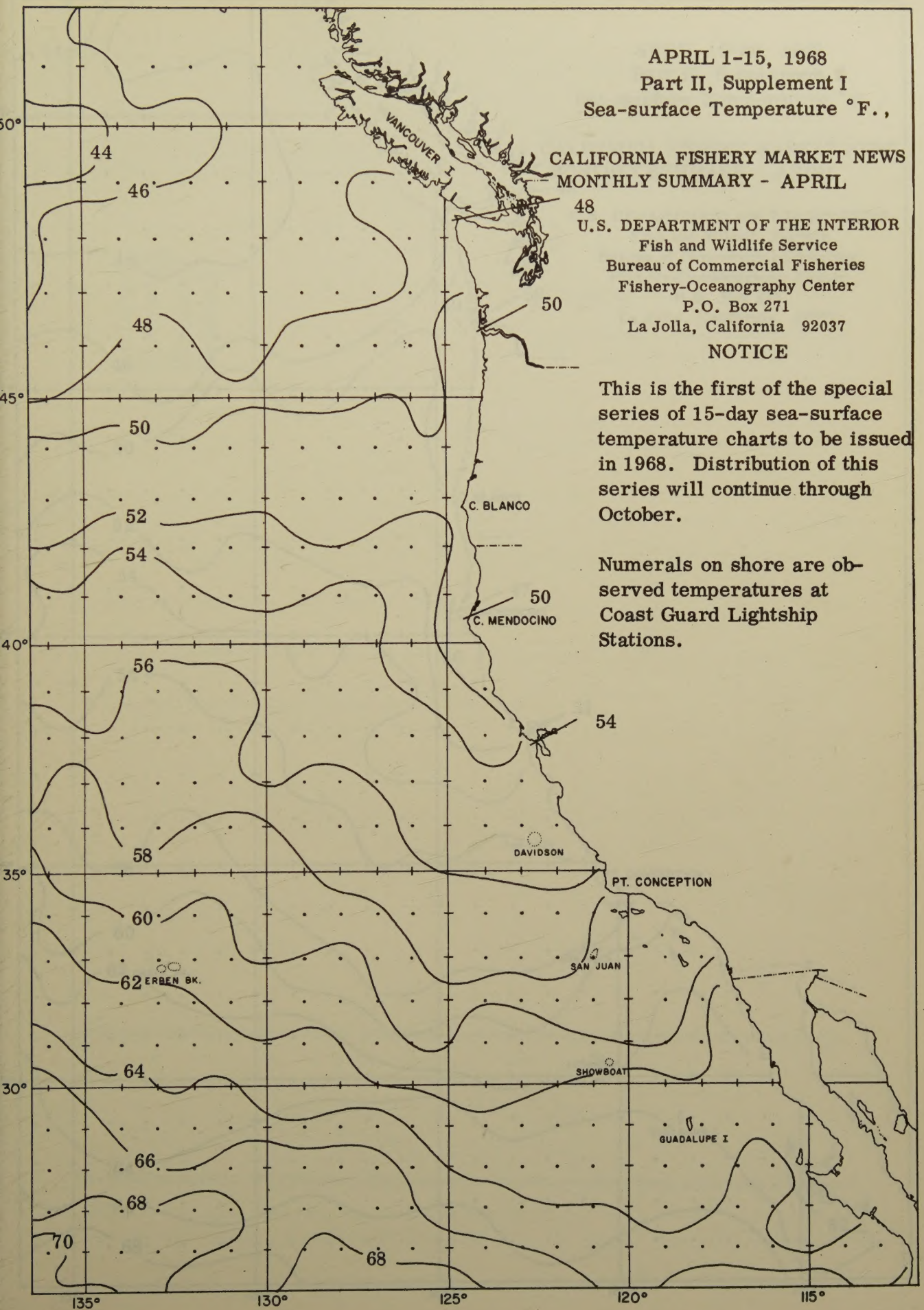

APRIL 1-30, 1968
FIG. 2 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1968.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2


APRIL 1-30, 1968
FIG.3- DEVIATION OF SEA SURFACE TEMP. (°F.) FROM APRIL 1967. HATCHED AREAS COLDER IN 1968.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


APRIL 1-30, 1968
FIG. 4 – SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
HAWAIIAN ISLANDS
Honolulu
PHOENIX ISLANDS
UNION ISLANDS
SAMOA ISLANDS
COOK ISLANDS
TUAMOTU ARCHIPELAGO
MARQUESAS
TUBUAI OR AUSTRAL IS.
KERMADEC IS.
Guaymas
Mazatlan
San Blas
Corrientes
Acapulco
Salina Cruz
Champerico
Guayaquil
Lima
Callao
Chala
Mollendo
Arica
Valdivia
Juan Fernandez
Mas A Fuera
S. Felix
S. Ambrosio
Easter I.
Pitcairn I.
Tahiti
Rarotonga
Nukuhiva
Hawaii
Midway I.
Johnston I.
Canton I.
Malden I.
Christmas I.
Samoa
Tonga Is.
Fiji Is.
Nauru I.
Gilbert Is.
Marshall Is.
Wake I.
Line Is.
Howland I.
Baker I.
Jarvis I.
Phoenix Is.
Union Is.
Tokelau Is.
Ellice Is.
Solomon Is.
New Hebrides
New Caledonia
Loyalty Is.
Norfolk I.
Lord Howe I.
Kermadec Is.
Tubuai or Austral Is.
Marquesas
Tuamotu Archipelago
Society Is.
Cook Is.
Samoa Is.
Union Is.
Phoenix Is.
Line Is.
Marshall Is.
Gilbert Is.
Nauru I.
Ellice Is.
Tokelau


APRIL 1-30, 1968
FIG. 5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM APRIL 1967 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1968.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GULF OF CAMPECHE
GULF OF PANAMA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
YUCATAN
CUBA
HAITI
JAMAICA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Colon
Panama
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Mollendo
Ilo
Salaverry
Esteria
Sala y Gomez
S. Felix
S. Ambosio
Juan Fernandez
Mas Afuera
Coquimbo
Constitu
Talcahuano
Concepcion
Valdivia
Mocha I.
Coops I.
Malpelo I.
Chp. 2 m I.
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°


APRIL 1-30, 1968
FIG. 6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1968.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Salina Cruz
Champerico
San Jose
La Union
Cormto
Managua
Colon
Panama
Chipperton I
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cerbeu
Mollendo
Ilo
Salay Gomez
Easter I
S Felix
S Ambrosio
Juan Fernandez
Mas Afuera
Constitucion
Talcahuano
Mocha I
Corral
Valdivia
Tampico
Vera Cruz
Progreso
Campeche
YUCATAN
Belize
North Stann Ck
Trujillo
Isla de Pinos
CUBA
Santiago
Jamaica
HAITI
Puerto Cabello
La Guaira
Barcos
Curacao
Aruba
Maracaibo
Cartagena
Bocas del Colorado
Punta Arenas
Balboa
La Palma
Chaldia
Galveston
CALIFORNIA
2.1 2.1
1.9 1.3
2.1 2.0
0.5 0.6
0.4 0.7 0.1
1.3 1.8 4.2
0.5 2.2 0.5 0.5 3.4
0.3 1.5 1.1 1.3
0.2 0.2 1.8 1.2 3.0 1.4 1.2 1.7 1.2 1.1
0.4 2.1 2.0 2.5 0.1 3.1 1.8 0.8
2.7 2.0 2.1 1.9 1.3 3.2 0.6
3.3 1.6 2.5 0.6
1.4 1.7 0.8 0.6
0.2 4.0
1.2
1.9
2.7
5.4
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°



APRIL 1-15, 1968
Part II, Supplement I
Sea-surface Temperature °F.,

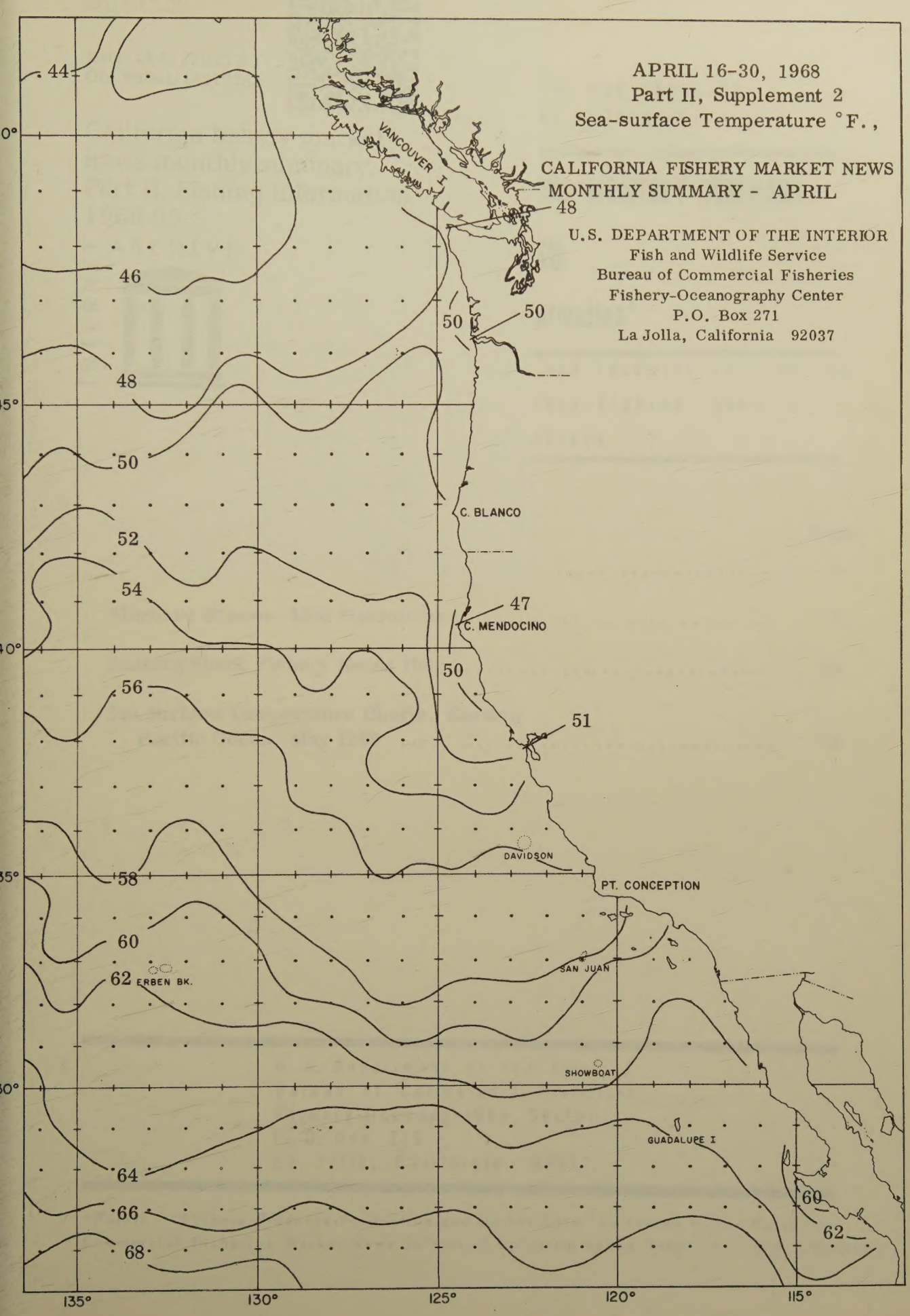
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - APRIL

U.S. DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P.O. Box 271
La Jolla, California 92037

NOTICE

This is the first of the special series of 15-day sea-surface temperature charts to be issued in 1968. Distribution of this series will continue through October.

Numerals on shore are observed temperatures at Coast Guard Lightship Stations.


APRIL 16-30, 1968
Part II, Supplement 2
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - APRIL
U.S. DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P.O. Box 271
La Jolla, California 92037
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
SHOWBOAT
GUADALUPE I
ERBEN BK.
44
46
48
50
52
54
56
58
60
62
64
66
68
135°
130°
125°
120°
115°